

Application No. 09/874,341

Attorney Docket No. PF000056

IN THE CLAIMS

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1. (Previously Presented) A signal processing apparatus [radiofrequency receiver having a bandwidth split in at least two selected working subbands separated by at least one non selected band] comprising:
  - radiowave receiving means which convert an electromagnetic wave into a first signal,
  - a first mixer which converts the first signal into a second signal by a fixed frequency transposition,
  - a filtering means which converts the second signal into a third signal by selecting part of the spectrum of the said second signal,
  - a second mixer which converts the third signal into a fourth signal by frequency transposition by means of a transposition signal coming from a frequency synthesizer,wherein the filtering means comprises a first bandpass filter for passing frequencies within a first frequency range, a second bandpass filter for passing frequencies within a second frequency range, wherein said first frequency range and said second frequency range are separated by a third frequency range, [at least two band-pass filters of the split bandwidths] wherein said filtering means is provided with switching means which make it possible to select either said first bandpass filter or said second bandpass filter [only one of the filters],  
wherein [and that] the frequency synthesizer generates [delivers] a transposition signal at a frequency determined in response the frequency range of the selected bandpass filter and the third frequency range [varying within a range depending on the width of the split bandwidths and on the width of the non selected bandwidth].
2. (Original) The receiver according to Claim 1, wherein the two filters have passbands of the same width.
3. (Original) The receiver according to Claim 2, wherein the frequency synthesizer delivers a signal whose frequency varies within a frequency range of the

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same width as the bandwidths of the two filters.

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4. (Original) The receiver according to Claim 3, wherein the frequency range is centred between the two passbands.

5. (Original) The receiver according to Claim 1, characterized in that the filtering means comprise three filters provided with switching means which make it possible to select only one of the filters, two filters having the same bandwidth, the third filter having a bandwidth twice as broad, and in that the frequency synthesizer delivers a signal whose frequency varies within a first frequency range, the width of which corresponds to the bandwidth of the two filters having the same bandwidth and within a second range which corresponds to twice the first range.

6. (currently amended) A radio frequency transmitter [having a bandwidth split in at least two selected working subbands separated by at least one non selected band] comprising:

- a first mixer which converts a first signal into a second signal by frequency transposition by means of a transposition signal coming from a frequency synthesizer,
- a filtering means which converts the second signal into a third signal by selecting part of the spectrum of the said second signal,
- a second mixer which converts the third signal into a fourth signal by a fixed frequency transposition,
- radiowave transmission means which convert the fourth signal into an electromagnetic wave,

wherein the filtering means comprises, a first bandpass filter for passing frequencies within a first frequency range, a second bandpass filter for passing frequencies within a second frequency range, wherein said first frequency range and said second frequency range are separated by a third frequency range, and a switching means for selecting one of the first bandpass filter and second bandpass filter[at least two band-pass filters of the split bandwidths provided with switching means which make it possible to select one of the filters],

wherein [and that] the frequency synthesizer generates [delivers] a

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transposition signal at a frequency determined in response the frequency range of the  
selected bandpass filter and the third frequency range [varying within a range  
depending on the width of the split bandwidths and on the width of the non selected  
bandwidth.]

7. (Original) The transmitter according to Claim 6, wherein the two filters have  
passbands of the same width.

8. (Original) The transmitter according to Claim 7, wherein the frequency  
synthesizer delivers a signal whose frequency varies within a frequency range of the  
same width as the bandwidths of the two filters.

9. (Original) The transmitter according to Claim 8, wherein the frequency  
range is centered between the two passbands.

10. (Original) The transmitter according to Claim 6, wherein the filtering  
means comprise three filters provided with switching means which make it possible to  
select only one of the filters, two filters having the same bandwidth, the third filter  
having a bandwidth twice as broad and in that the frequency synthesizer delivers a  
signal whose frequency varies within a first frequency range, the width of which  
corresponds to the bandwidth of the two filters having the same bandwidth, and within  
a second range which corresponds to twice the first range.

11. (cancelled)